



# University of Hawaii at Manoa

## Environmental Center

A Unit of Water Resources Research Center  
Crawford 317 • 2550 Campus Road  
Honolulu, Hawaii 96822  
Telephone (808) 956-7361

RL:0980.1  
Revised

SR 15 and SCR 12  
REQUESTING THE STATE OF HAWAII  
TO SUPPORT EPA WAIVERS OF SECONDARY TREATMENT  
FOR THE SAND ISLAND AND HONOULIULI WASTEWATER TREATMENT PLANTS

Statement for  
Senate Committee on  
Agriculture and Environmental Protection  
Public Hearing - March 14, 1991

By  
Jacquelin Miller, Environmental Center  
Roger Fujioka, Water Resources Research Center  
Stephen Lau, Water Resources Research Center  
Alison Kay, Zoology  
Julie Brock, Zoology

SR15 and SCR 12 express the support of the legislature for the continued issuance of secondary treatment waivers for the Sand Island and Honouliuli Waste Water Treatment Plants.

Our statement on these resolutions does not represent an institutional position of the University of Hawaii.

In preparing a statement for the hearing today, I reviewed the history of the secondary treatment waiver as indicated in our files beginning in 1970 and the work that has been undertaken since then particularly with regard to evaluating the environmental and health implications of the discharge of primary treated wastewater at Sand Island and Honouliuli. I also sought the advice of researchers from the University community that have been directly involved with this issue. The following comments reflect the results of this inquiry.

Through the leadership of our former Director, Doak Cox, the Environmental Center undertook a major role in the initial review and evaluation of primary vs. secondary treatment and the relative benefits and costs of both systems with regard to off-shore discharges of sewage effluents to deep water. Individuals from a broad spectrum of scientific disciplines and from many mainland states were consulted and actively participated in these early evaluations. The result of these studies led to our support of the initial waiver of the requirement for secondary treatment for deep water outfalls at Sand Island and Honouliuli.

More recently, researchers at the UH Water Resources Research Center (WRRC) have been conducting a series of multidisciplinary studies over time to assess the impact of ocean disposal of primary treated sewage from Sand Island and Honouliuli wastewater treatment plants. Other studies by WRRC personnel have demonstrated the feasibility of the reuse of primary effluent from the Honouliuli plant for large scale water reclamation. Based on the analysis of all the data obtained, it is the recommendation of these researchers that the state should vigorously support the City and County of Honolulu's waiver of the U.S. Environmental Protection Agency (EPA) requirement for secondary treatment at Sand Island and Honouliuli.

It should be noted that the City and County of Honolulu has been very diligent in supporting these long term monitoring studies. Perhaps recognition of the importance of these studies should be added as an additional "whereas" in this resolution with a proviso to encourage a continuation of the monitoring so as to ensure that any public health and ecological issues will be subject to ongoing evaluation.

Other testifiers today, specifically Drs. Doak Cox and Hans Jurgen-Krock will provide more detailed information with regard to the discharge of primary vs. secondary treated effluents and the issues raised as to the potential for oxygen depletion in the receiving waters; potential health risks; potential for negative impacts to the marine biota; and finally, last but not least, the economic costs versus the societal and environmental benefits for each treatment method. In each of these issues, our reviewers have concurred that the discharge of primary treated wastes at the Sand Island and Honouliuli STP poses no risk to public health, the marine biota, or the environment. Furthermore, since there will be no measureable improvement to the environment or public health, any monies spent on secondary treatment will be without benefit.

We strongly concur with the intent of SR 15 SCR 12.

Thank you for the opportunity to present this statement.